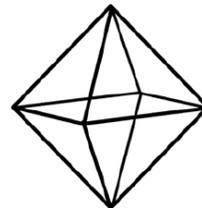


US EPA ARCHIVE DOCUMENT

Proposed Modification to Design Basis: Groundwater Discharge Permit No. GW1810162

David List, P.E.
Golder Associates Inc.

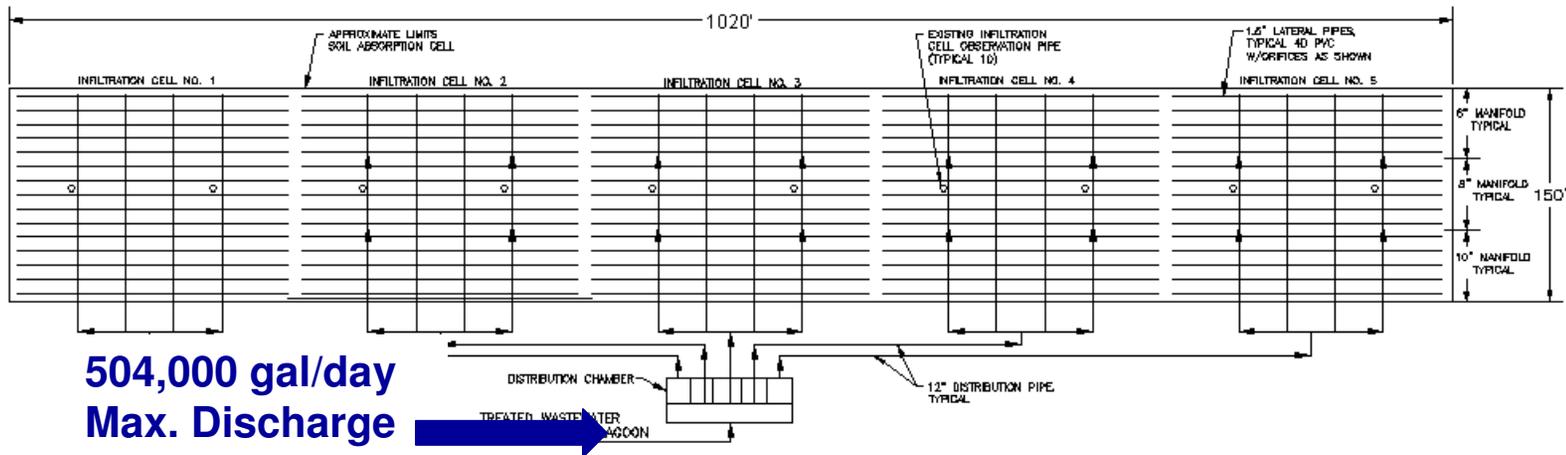


Kennecott
Eagle Minerals

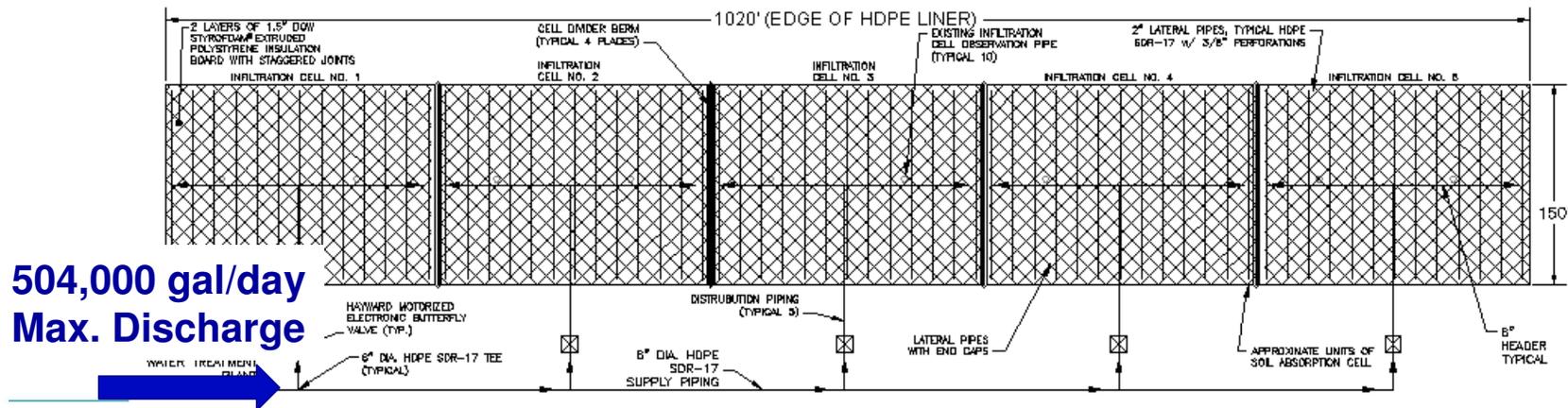


Infiltration System: Existing Permitted Design versus Proposed Modified Design

Existing Permitted Designed Treated Water Infiltration System



Proposed Modified Designed Treated Water Infiltration System

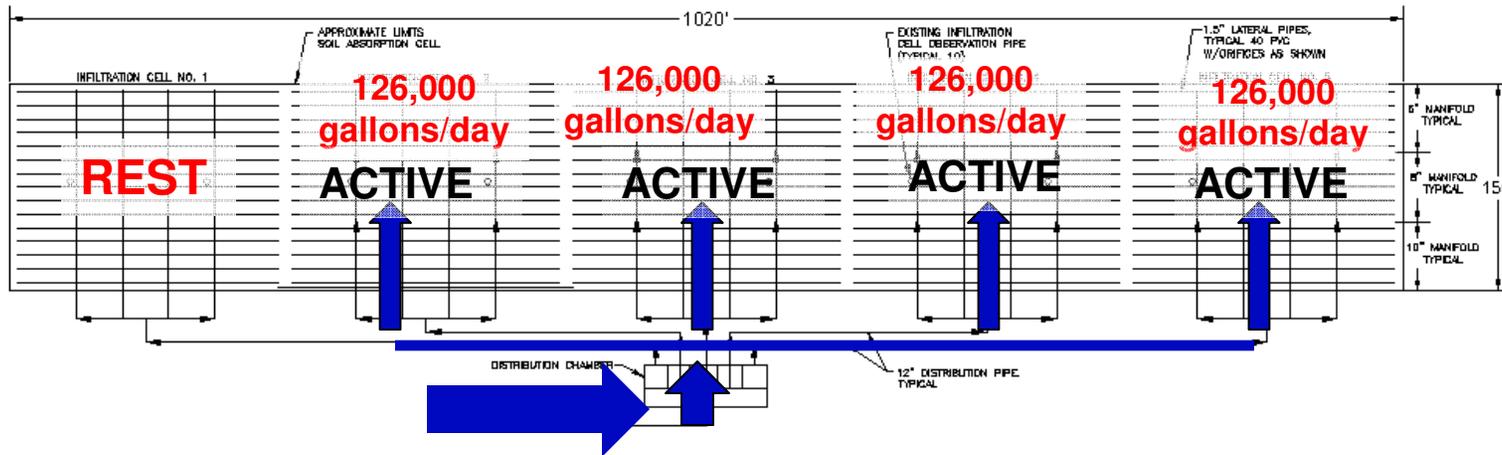


March 25, 2010

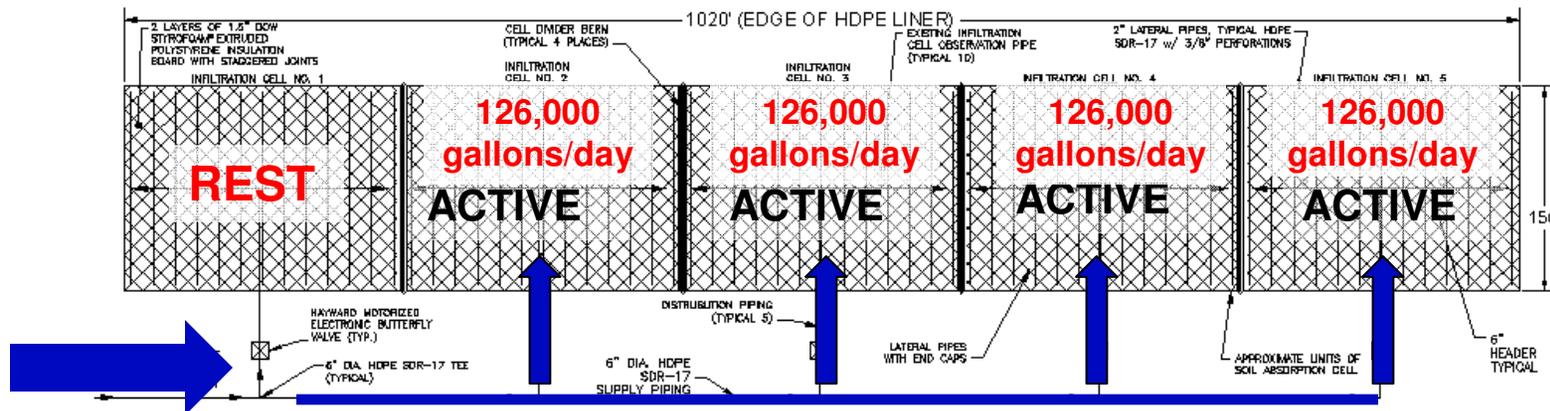


Infiltration System: Existing Permitted Design versus Proposed Modified Design

Existing Permitted Designed Treated Water Infiltration System



Proposed Modified Designed Treated Water Infiltration System

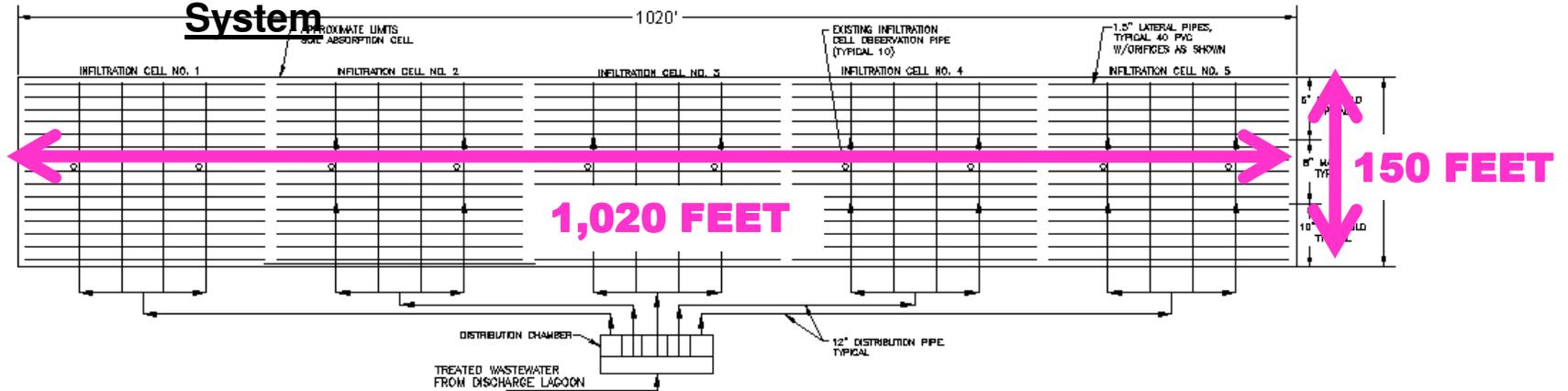


March 25, 2010

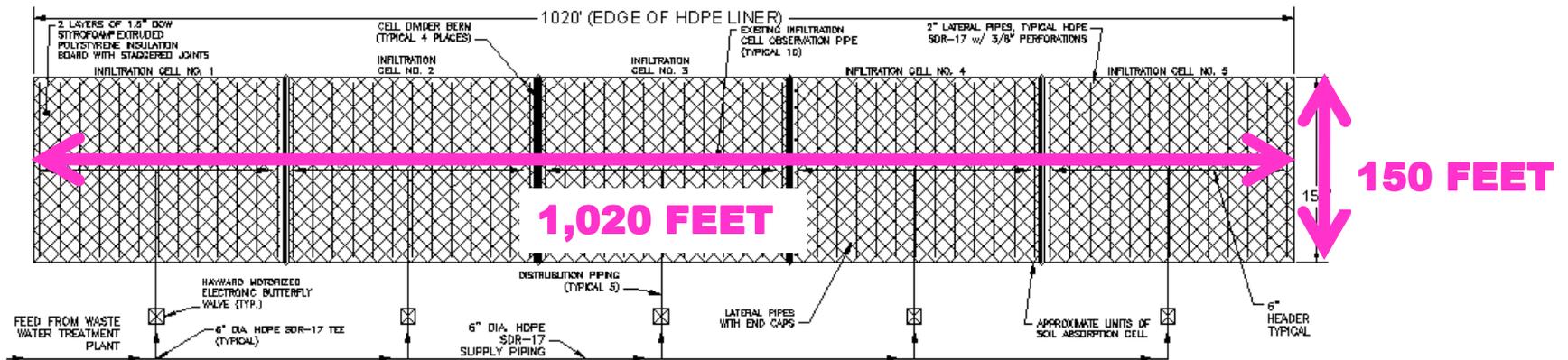


Infiltration System: Existing Permitted Design versus Proposed Modified Design

Existing Permitted Designed Treated Water Infiltration System



Proposed Modified Designed Treated Water Infiltration System

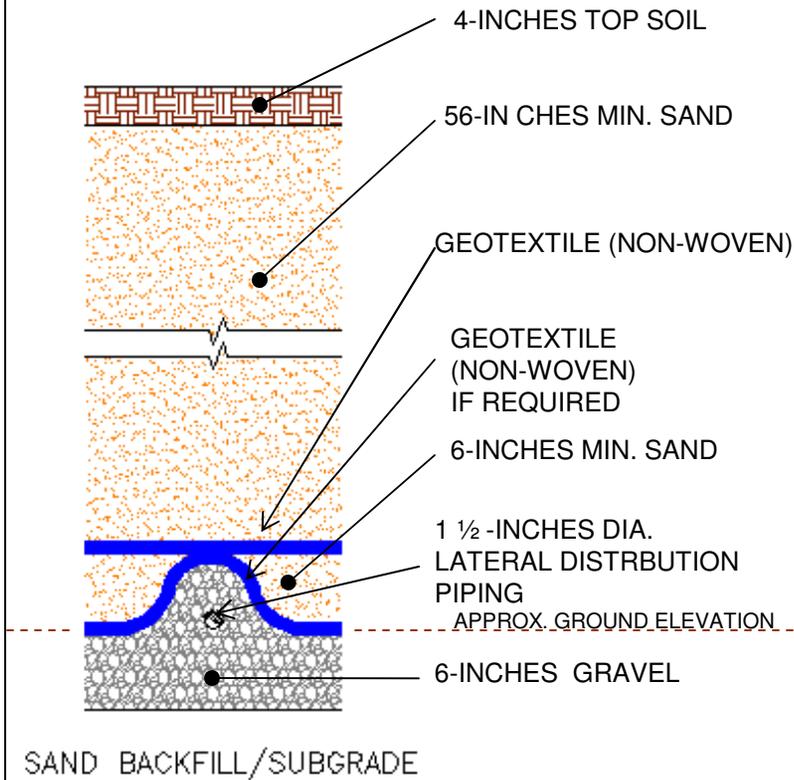


March 25, 2010

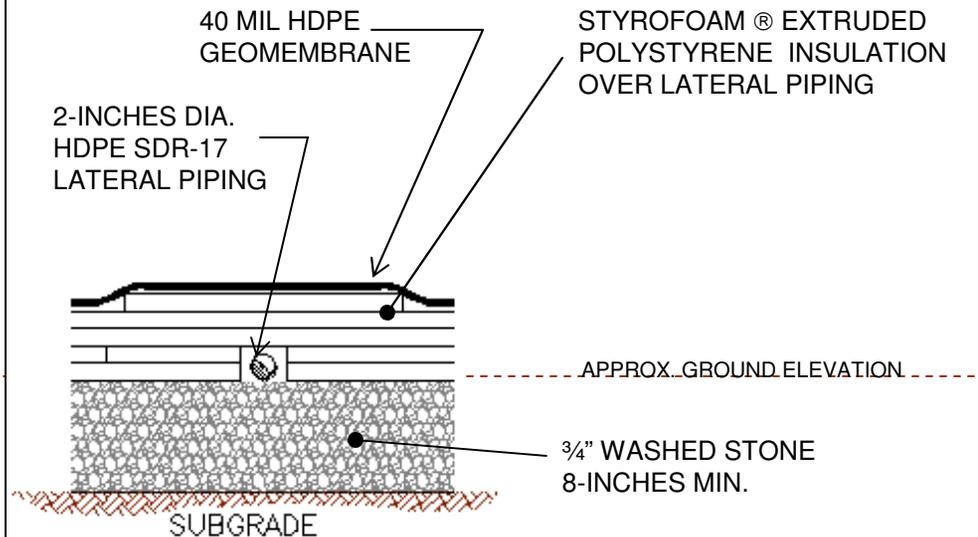


Infiltration System: Existing Permitted Design versus Proposed Modified Design

Existing Permitted Designed Treated Water Infiltration System – Cross-Section



Proposed Modified Designed Treated Water Infiltration System – Cross-Section



March 25, 2010

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Summary of What was Modified

In summary, the proposed modifications include:

- ❑ Water is delivered to the infiltration system in a slightly different manner namely eliminating the distribution chamber and replacing it with individual valves and flow meters.

- ❑ The diameter of the laterals has been increased from 1.5 inch PVC to 2 inch HDPE.

- ❑ The length of the lateral distribution pipe has been decreased.

- ❑ The cover system has changed from several feet of soil to synthetic insulation overlain by a geomembrane.



Summary of What is Unchanged

Most importantly, this design does not change the chief precepts of the permitted rapid infiltration system. These design precepts include:

- ❑ The source, quantity and quality of the treated water is unchanged.
- ❑ The location is unchanged.
- ❑ The original footprint and dimensions are unchanged.
- ❑ The maximum discharge rate of 504,000 gallons per day is unchanged.
- ❑ The maximum loading rate of 10 gallons per square foot per day is unchanged.
- ❑ The operational plan to use 4 cells at any given time and rest 1 cell is unchanged.
- ❑ The perimeter ditch preventing surface water run-on and run-off remains unchanged.